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A Brief Summary of Economic Conditions

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FEEDING of livestock . . . Production and marketing of southern fruits and vegetables . . . Crushing of cottonseed for oil and meal . . . Wintering of dairy cows . . . Planning for 1938. These occupy the center of the agricultural scene at close of fall. * * * The acreage of winter wheat is expected to be about the same as in 1936; a large increase in livestock feeding—of cattle and hogs and sheep—is in evidence (the supply of feed per farm animal is largest in more than 10 years); the cottonseed crop is the biggest on record. * * * Prices of farm products are around low figures for the year, but the average for 1937 is expected to be about 7 percent more than in 1936. Farm income continues to exceed 1936 figures. Total income from marketings and Government payments in the first 10 months was 750 million dollars more than a year ago. * * * Nonagricultural buying power continues relatively high, food prices having declined more than income this Fall. The food buying power of nonagricultural income per capita of the population in October was 4 percent higher than a year ago.

Commodity Reviews

DEMAND: Reduced

THE domestic demand for farm products will be less in the next few months than in the corresponding period a year ago; but improvement is expected in the latter half of 1938, if the expected increase in industrial production is realized. Continuation of the advancing phase of building construction would be an added stimulus.

The current decline in industrial activity is a common phenomenon of any major business cycle. It characterizes a period when business sentiment becomes less optimistic, security prices decline, business men postpone extensive commitments, and general uncertainty leads to hesitant buying by potential consumers of many products.

Analysis of basic factors affecting the demand for farm products indicates that the current recession is a temporary interruption of a longer-time upward trend. Business debts are low, credit is cheap and plentiful, banking resources are not strained, there has been no building boom, there has been an absence of violent speculation of the type which frequently precedes the end of a major business upswing.

It appears that the volume of American agricultural exports will increase during the first part of 1938 to make up foreign shortages in commodities which are in larger supply in the United States. But these products will move at lower average prices than in 1937. During the past year there have been reductions in foreign import duties and charges, and in several countries a relaxing of quantitative control of imports. Some further relaxation of trade barriers is in prospect during 1938-39.

FARM INCOME: Higher

Despite declining prices, farm income from marketings in October was \$91,000,000 more than in September. It was \$25,000,000 more than in

October a year ago. But the gain from September to October this year compares with an advance of \$130,000,000 in the corresponding period of 1936.

Lower prices have restricted the volume of marketings this fall, especially of grains, cotton, and some of the meat animals. Despite a record cotton crop, receipts of cotton at the 10 principal spot markets were slightly less this October than last.

Compared with a year ago, the larger October income was due chiefly to increases from tobacco, corn, wheat, and apples. Income from cotton was less, and reduced marketings of all classes of meat animals and of dairy products more than offset higher prices on these items.

Cash income from sales of farm products the first 10 months of this year totaled \$6,732,000,000. This compared with \$6,104,000,000 in the corresponding period of 1936. The increase of 10 percent was due to higher average prices of products, since the volume of marketings was slightly less. And producers of crops shared more in the gains than producers of livestock and of livestock products. Farmers received in addition \$355,000,000 of Government payments, compared with \$232,000,000 in 1936.

Income from marketings in November last year was \$749,000,000. Income this November may have been less, since prices of farm products declined early in the month and marketings of some major commodities were light.

The following table gives the income figures for September and October 1936 and 1937:

	From marketings	From Government payments	Total
October:			
1937.....	\$907, 000, 000	\$4, 000, 000	\$911, 000, 000
1936.....	882, 000, 000	22, 000, 000	904, 000, 000
September:			
1937.....	816, 000, 000	5, 000, 000	821, 000, 000
1936.....	752, 000, 000	6, 000, 000	758, 000, 000

PRICES: New Lows

Prices of a number of farm products were at new seasonal lows on November 15. The index of prices received by farmers on that date was 107, which was 5 points less than on October 15, and 13 points less than on November 15 a year ago.

The decline during the last month of record was due chiefly to lower prices of hogs, cattle, corn, wheat, and cotton. Prices of dairy products advanced. Lower, also, were prices paid by farmers for feed. The purchasing power of farm products at 84 in the index, compared with 88 on October 15, and with 94 in November last year.

Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid	Buying power of farm products ¹
1936			
November.....	120	127	94
December.....	126	128	98
1937			
January.....	131	130	101
February.....	127	132	96
March.....	128	132	97
April.....	130	134	97
May.....	128	134	96
June.....	124	134	93
July.....	125	133	94
August.....	123	132	93
September.....	118	130	91
October.....	112	² 128	² 88
November.....	107	² 128	² 84

¹ Ratio of prices received to prices paid.

² Preliminary.

Prices of Farm Products

Estimates of average prices received by producers at local farm markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and States.

Product	5-year average, August 1909-July 1914	November average, 1909-13	November 1936	October 1937	November 1937	Parity price, November 1937
Cotton, lb.....cents..	12. 4	12. 1	12. 0	8. 1	7. 7	16. 4
Corn, bu.....do.....	64. 2	59. 4	94. 6	58. 9	48. 0	84. 7
Wheat, bu.....do.....	88. 4	87. 3	106. 4	88. 7	81. 9	116. 7
Hay, ton.....dollars..	11. 87	11. 89	10. 73	8. 77	8. 74	15. 67
Potatoes, bu.....cents..	69. 7	61. 4	98. 0	48. 5	51. 2	91. 0
Oats, bu.....do.....	39. 9	38. 2	44. 2	28. 8	28. 7	52. 7
Soybeans, bu.....do.....	(¹)	(¹)	112. 1	85. 8	83. 1	-----
Peanuts, lb.....do.....	4. 8	4. 5	3. 3	3. 2	3. 2	6. 3
Beef cattle, cwt.....dollars..	5. 21	5. 01	5. 97	7. 19	6. 53	6. 88
Hogs, cwt.....do.....	7. 22	6. 96	8. 74	9. 78	8. 25	9. 53
Chickens, lb.....cents..	11. 4	10. 8	13. 2	17. 6	16. 9	15. 0
Eggs, doz.....do.....	21. 5	27. 8	32. 5	25. 2	28. 0	² 40. 8
Butterfat, lb.....do.....	26. 3	28. 5	33. 1	35. 1	36. 2	² 36. 8
Wool, lb.....do.....	³ 18. 3	18. 5	27. 2	29. 2	26. 0	24. 2
Veal calves, cwt.....dollars..	6. 75	6. 74	7. 46	8. 76	8. 34	8. 91
Lambs, cwt.....do.....	5. 87	5. 31	7. 23	8. 42	7. 87	7. 75
Horses, each.....do.....	136. 60	133. 00	90. 50	90. 20	88. 00	180. 30

¹ Prices not available.

² Adjusted for seasonality.

³ Revised.

Declining prices this fall have lowered the farm price index from summer levels, but the average index for 11 months is 123, compared with 113 in the corresponding period last year. The purchasing power figure for the period is 93 compared with 92 in 1936.

From November to December last year there was a gain of 6 points in the farm price index, due to drought conditions and rising consumer buying power. The average of prices for the year 1937 is expected to be about 7 percent above 1936 figures.

WHEAT: Markets Lag

Persons interested in wheat are watching closely the crop estimates for Argentina and Australia for an important clue to the future trend of prices. Other factors expected to affect prices over the near term are the European demand for wheat, the policy of Soviet Russia regarding wheat exports, and general business conditions here and abroad.

United States wheat prices declined in early November to lowest figures in about 17 months, but the decline was checked by heavy frost damage in Argentina. The decline resulted from improved crop prospects and continued heavy shipments of Russian and Danubian wheat, the disappointingly small exports of wheat from this country, the slump in the stock market, and the low prices in Winnipeg and Buenos Aires.

The outlook for exports of United States wheat continues good, however, since the prospective surplus in Argentina has been materially reduced by frost, and Canada has only a small surplus remaining for export. Moreover, there is a wide spread in domestic prices below prices in importing countries.

Exports of United States wheat and flour in terms of wheat were about 23,000,000 bushels during the period July 1 to November 15. Exports for the full year are expected to total about 95,000,000 bushels, largely of hard red winter and white wheats.

Latest official 1937 crop reports for this country indicate that supplies of hard red spring and durum wheats are about ample to take care of prospective domestic requirements. But there is a considerable excess of hard and soft red winter and white wheats. Should exports total 95,000,000 bushels, the United States carry-over of wheat on July 1, 1938, may be slightly over 200,000,000 bushels, or about double the small carry-over on July 1, 1937.

COTTON: Heavy Ginnings

Eighty-five percent of this year's record crop of cotton had been ginned by December 1. The crop is averaging lower in grade and shorter in staple this year than last, but as usual a large part of it is of tenderable grade and staple.

But while ginnings have been large, marketings of cotton have been relatively light due in part to low prices. Prices at spot markets in mid-November were below 8 cents for Middling $\frac{3}{8}$ -inch cotton, whereas the spot price at the 10 markets during 1936-37 averaged 12.70 cents.

Adverse factors in the situation this fall have been the large domestic and foreign crops, declining cotton consumption, and increasing stocks of cotton textiles in the United States, a sharp curtailment in cotton purchases by Japan, reduced cotton mill activity in China, and marked declines in prices of many other commodities.

About 2,000,000 bales of cotton were exported from August 1 through November 12, with exports to Great Britain exceeding those to any other country. They amounted to 630,000 bales compared with 382,000 bales in the corresponding period last year.

World supply of cotton for the 1937-38 season is estimated at about 51,800,000 bales. This is 17 percent larger than the supply last season, and one-third more than the average for the 5 years 1928-32. The world supply of American cotton is expected to

be about 24,600,000 bales, or 27 percent more than last season.

The 1938 United States acreage goal under the Agricultural Conservation program has been set at about 28,000,000 acres. This acreage, with yields equal to the average for the last 4 years, would give a crop about 7,500,000 bales less than the 18,746,000 produced this year.

COTTONSEED: Record Supply

Record supplies of cottonseed and of cottonseed oil were indicated by the December 8 crop report. The former is estimated at 8,300,000 tons, or 50 percent more than in 1936-37; the latter at 2,400,000,000 pounds, an increase of 39 percent over 1936. Stocks of cottonseed oil at the beginning of the season also were large.

Prices of cottonseed during the first quarter of the current marketing year were about 35 percent less than in the corresponding quarter last year; prices of cottonseed oil were down about 29 percent. But cottonseed was selling for little less than the 5-year average of prices; cottonseed oil for 7 percent more.

Exports of cottonseed oil are expected to bulk large this year despite increased production abroad; another factor favorable to this oil is the relatively small domestic supply of lard. Cottonseed cake, meal, and hulls are in a less favorable position, because the supply of feed crops is large.

SOYBEANS: Market Lower

With a total production of 39 million bushels of soybeans, 25 million may be crushed for oil in the United States this year; possibly more, should exports of beans from the current crop be small. Largest domestic soybean production on record was the crop of 44,378,000 bushels in 1935, when crushings totaled 25,181,000 bushels.

Soybean oil is in a less favorable position this year because of prospects for a record production of cottonseed

oil. This will tend to reduce prices; but the reduction will be limited by a continued good demand for soybean oil for use in food products.

Increasing quantities of soybean oil have been used in food products during recent years of relatively small supplies of lard. The immediate outlook is for continuing small production of lard; the longer prospect is for gradually increasing lard production during the next 3 years.

Prices of soybean meal will be affected by the large production of other high-protein feeds, especially of cottonseed meal.

FRUITS: Heavy Shipments

The November fruit situation was featured by large shipments of oranges from Florida, seasonal declines in prices of oranges and grapefruit, and higher prices on eastern apples. Prices of western apples in eastern markets declined from the levels of early October as market supplies increased.

Shipments of California navel oranges began in early November, but have been relatively light. The indicated production of navel and miscellaneous oranges in California is larger this year than last, but 3 percent less than the 1931-35 average. The total Florida orange crop is indicated to be the largest on record.

Production of grapefruit was indicated by the November crop report at 25,455,000 boxes. This represents reductions from last year of 5,000,000 boxes in Florida and 1,000,000 boxes in Texas, but an increase in Arizona and California. The total crop last year was 30,281,000 boxes.

Eastern apples were selling in New York wholesale markets in mid-November at an average of \$1.16 a bushel; western apples in the auctions at \$1.70 a box. November 1 cold-storage stocks of eastern apples were the largest on record. Stocks of western apples were a little less than on the same date last year.

TRUCK CROPS: South

The center of the truck crop situation has shifted to the South and the West since the northern shipping season has ended, except for the movement from storage of late cabbage, celery, carrots, and onions. Although acreage of truck crops for winter and early spring markets is a little less than last year's, it is much above average.

The first freeze flash of the season came through in late November from Texas where the damage to fall vegetables ranged from 20 to 60 percent. Below-freezing temperatures on December 7 and 8 caused considerable damage in many important vegetable sections of Florida.

The fall crop of snap beans in Florida and Texas has been indicated at 40 percent less than the 1936 harvest, but production of California carrots is expected to set a new high record. The output of cauliflower in fall and winter States is indicated at a little less than in 1936, but California will produce a somewhat larger crop this year of fall and winter celery.

Cucumbers are a larger crop in Florida this fall, and eggplants will be more plentiful from Florida and Texas. The acreage of lettuce in the early States is 40,200 acres, compared with 35,200 last year, and a 5-year average of 49,740. A 13-percent increase in acreage of Bermuda onions in the early group of States is indicated by farmers' intentions reports, above the 1937 harvested acreage.

A sizable increase in the fall crop of green peppers is expected in Florida and Texas. Production of tomatoes in Florida and Texas has been estimated at 455,000 bushels, compared with 481,000 in 1936, and with 256,000 bushels, the 5-year average.

CANNING CROPS: Big

A 15 to 20 percent increase in total supply of canned vegetables for 1937-38 has been estimated by the Bureau of Agricultural Economics. Prices have gone down, enough to cause canners to contract for smaller acreage in 1938.

The acreage planted in 1937 was only about 2 percent more than in 1936, but big yields increased the production of canning crops by about 15 percent. Supplies of major canned vegetables—snap beans, sweet corn, and green peas—are much larger than in 1936, but supplies of canned tomatoes are about the same.

For most of the minor canning crops, the situation parallels that of canning crops in general.

POTATOES: Little Change

Potato prices at market centers were little changed in mid-November from a month earlier. The harvest in the late States had been practically completed, with yields lower than earlier expectations. The late crop was indicated by the Bureau of Agricultural Economics at 317 million bushels. This is about 40 million more than in 1936, and 17 million more than the 1928-32 average.

Production in the 8 Eastern late States has been indicated at 111 million bushels, or nearly 5 million more than in 1936; in the 10 Central States at 115 million, or 24 million more than last year; in the 12 Western States at 91 million bushels or about 11 million more than in 1936.

The new crop in Texas has been indicated by the Bureau at 222 thousand bushels, compared with 147 thousand a year ago, and with the 1928-32 average of 120 thousand. The increase in acreage was induced by the fairly high prices received by Texas growers for their fall crop last season.

CATTLE: On Feed

A marked increase in cattle feeding is expected in late 1937 and in 1938, induced by the larger supply and lower prices of feed, the high level of prices of finished cattle in recent months, the relatively wide margins obtained in cattle-feeding operations the last 6 months, and the relatively small number of hogs to consume the increased feed supplies.

Shipments of stocker and feeder cattle from public stockyards into the Corn Belt, July through October, this year were about 15 percent larger than in 1936, about the same as in 1935, and about 6 percent more than the 5-year, 1932-36, average. Shipments into States east of the Mississippi River were the largest on record.

Direct shipments (not going through public stockyards) into the Corn Belt were about the same or slightly smaller during the period this year than last. But including cattle carried over from last year, many more cattle will be fed in the Corn Belt this feeding season than last.

About the same number of cattle this season as last will be fed in the Rocky Mountain States, and a sharp reduction is indicated for the Inter-mountain and Pacific States. Texas, Oklahoma, and other Cotton Belt States probably will feed more cattle in view of the increased supply and lower prices of cottonseed cake and hulls.

Shipments of feeder cattle into the Lancaster, Pa., feeding area were the largest on record from July through September.

HOGS: Lower Priced

Hogs, having dropped more than 25 percent since the peak of prices in mid-August, are selling for less than at this time a year ago. Factors in the decline have been a more than usual increase in slaughter supplies, and weakened storage and consumer demand. Lard prices have been adversely affected by the prospective large production of cottonseed oil,

Last fall there was a strong storage demand for hog products in anticipation of small supplies and higher prices later in the marketing year. This fall the prospect is for relatively large supplies in the last half of the year.

But despite the sharp decline this fall, the price of hogs is relatively high

compared with the price of corn. In early November, the hog-corn price ratio (based on Chicago prices of hogs and corn) was more than 16, compared with about 9 a year ago, and with a long-time average of 11.4.

On the basis of present and prospective prices of hogs and corn, the returns from feeding corn to hogs this year will be much larger than from selling corn for cash. More pigs will be raised in 1938 than in 1937, but the increase will not be reflected in larger slaughter until late 1938 and 1939.

Average feed grain production in 1938 and 1939 would induce further expansion in production; even so, the number of pigs raised will not reach the 1929-33 average before 1940.

LAMBS: Prices Up

Lamb prices strengthened in early November following the late October decline. Prices of both feeder and slaughter stock ruled higher than in the same period last year.

The movement of feeder lambs from market and direct have been much larger this fall than last; from Texas producing areas to other States and to feeding areas within Texas, the movement set a new high record for October. Shipments went to Colorado and Nebraska feed lots and into Corn Belt feeding areas. There was a large movement of Texas and other lambs to wheat pastures in Texas, Oklahoma, and Kansas.

A 10-percent increase in shipments of feeders from 12 leading markets into the Corn Belt States this October compared with last was recorded. From July through October the shipments from markets into the Corn Belt areas was 15 to 20 percent larger than in the corresponding period a year ago. Most of the increase went into States west of the Mississippi River.

Indications are that more lambs will be fed this season than last in the Corn Belt States, in Texas, and in Colorado, but fewer will be fed in the other

Rocky Mountain States, and small numbers in States west of the Continental Divide. But the number fed in the Scottsbluff, Nebr., area is expected to set a new high record.

The number fed in the Arkansas Valley, San Luis Valley, and on the western slope of Colorado will be about the same this year as last.

WOOL: Prices Down

Prices of wool in the United States have been downward since last April; prices in foreign markets began to decline in early September. The prospect is for a lower average of wool prices in 1938 compared with 1937.

World supplies of wool next year may be slightly larger than in 1937, but below average. Mill consumption of wool here and in some foreign countries is expected to be less than in the present year.

Consumption of apparel wool on a scoured basis by United States mills in the first 9 months of this year was about 5 percent more than in the corresponding period of 1936. Consumption in the last quarter has been less than in the same period last year.

DAIRY PRODUCTS: Good Position

Dairy products are in better supply and demand position than most other farm commodities. Butter stocks in storage are smallest in 5 years; the supply of cheese is less than at this time last year.

Milk production in early November was about 4 percent less than in the corresponding period last year; production of manufactured dairy products this fall has been smallest for the period in several years.

Consumption of dairy products has been well maintained; this accounts for the marked reduction in storage supplies during a period of reduced production. Production is expected to increase this winter since prices of butterfat and milk are high in relation to feeds.

Conditions seem moderately favorable for dairying during the next several years. There are 6 percent fewer milk cows than at the peak in 1934, but no material change is expected before the end of 1938.

POULTRY: Prices Up

Turkeys dominated the poultry situation in November. They arrived in good supply and good flesh in Thanksgiving markets; wholesale prices were 3 to 5 cents a pound above prices a year ago. The November farm price the country over averaged 18 cents compared with 15 cents a year ago.

Market men noted that despite an estimated 10 percent reduction in production of turkeys this year, there was no corresponding drop in the number marketed during November. The explanation is found in producers' previously announced intentions to market a larger proportion of this year's crop for Thanksgiving.

As for chickens, the improvement in the feed situation seems to have checked the sale of laying birds. The seasonal gain in number of layers during October was only slightly less than usual; nevertheless, the average size of farm flocks on November 1 was the smallest on record—69 layers, compared with 72 on the same date last year, and with 76 as the November 1, 1925-34, average.

Meanwhile, the production of eggs per bird and per farm flock has been at record high figures for this time of year. The average flock was laying at the rate of 15 eggs a day in early November, compared with only 13 by the larger flocks a year ago. Record production of eggs this fall, plus large stocks in storage have tended to check the usual seasonal rise in egg prices.

Eastern and mid-Western hatcherymen have reported the largest October production of baby chicks on record—75 percent above production in October a year ago. This may result in a congestion of broilers at some of the eastern markets in late December.

Big Yields Raise Crop Production¹

RECORD yields of cotton, and higher-than-average yields of corn, oats, tobacco, tame hay, potatoes, and other products have raised the total production of principal crops this year to within 2 percent of the all-time record production in 1920.

This year's yield of cotton has been estimated at 264.6 pounds to the acre—the largest on Government record covering a period of more than 70 years. The smallest cotton yield on record was 121.5 pounds to the acre in 1866.

The cotton area this year was 33,930,000 acres. This fell about midway between the largest area on record—44,608,000 acres in 1926—and the smallest on record during the last 20 years—26,866,000 acres in 1934.

Corn yields this year have been estimated at 27.6 bushels to the acre. The largest yield of corn on record was 31.7 bushels in 1906; the smallest, 15.8 bushels in 1934. The largest corn area on record was 110,893,000 acres in 1917; the smallest in the last 20 years was 92,354,000 acres in 1934. The 1937 area was 96,146,000 acres.

SIMILAR wide variations in yields and in area are shown in the records for other crops. The average yield of wheat in 1937 has been estimated at 13 bushels to the acre. The largest ever recorded was 16.7 bushels in 1915; the smallest 10.9 bushels in 1876. The biggest wheat area was 73,700,000 acres in 1919; the smallest in the last 20 years was 43,400,000 acres in 1934. The wheat area in 1937 was 68,198,000 acres.

¹ 1937 cotton figures based on December crop report; all other 1937 figures based on November reports.

Oats this year are turning out an estimated 32.1 bushels to the acre. This is larger than the 1923-32 average. It compares with the all-time record yield of 37 bushels to the acre in 1915, and the smallest recorded yield of 18.4 bushels in 1934. The area of oats has ranged from a low of 29,455,000 acres in 1934 (the smallest in the last 20 years) to an all-time high of 45,539,000 acres in 1921. This year the area was 35,933,000 acres.

Tobacco shows an average yield this year of 879 pounds to the acre. This is little less than the all-time record high yield of 902.6 pounds in 1935. The smallest recorded yield of tobacco was 575 pounds in 1874. The largest tobacco area on record was 2,124,300 acres in 1930; the smallest in the last 20 years was 1,278,500 in 1934. The 1937 figure is 1,689,700 acres.

The average yield of tame hay for this year has been computed at 1.34 tons to the acre. The largest yield of record was 1.46 tons in 1916; the smallest was 0.98 of a ton in 1895. The largest tame hay area of record was 59,293,000 acres in 1924; the smallest in the last 20 years was 54,013,000 acres in 1928. For 1937 the figure was 55,773,000 acres.

Potato yields this year are much higher than average. At 121.5 bushels to the acre, yields are close to the all-time record high of 123.7 bushels in 1924. The smallest yield of record was 62.7 bushels in 1881. The largest potato area of record was 3,946,000 acres in 1922; the smallest in the last 20 years was 2,809,800 acres in 1925. The 1937 area was 3,224,000 acres.

More hired labor was employed on farms this fall than last. The average per 100 farms of crop reporters on November 1 was 104 hired workers, compared with 95 on the same date a year ago. The South Atlantic was the only region showing a reduction.

The average rate paid workers for picking cotton in the United States in 1937 was the same as in 1936. Rates averaged 69 cents per 100 pounds for the entire country. They ranged from 60 to 65 cents in the southeast to 95 cents in California.

Full Rations for Livestock

UNUSUALLY high yields of corn and oats in most of the Central States have resulted in largest supplies of feed grains since 1932. The production of byproduct feeds is also expected to be the largest in recent years. The number of grain consuming animal units, on the other hand, is probably little different from a year ago, when it was 12 percent less than the 1929-33 average. Supplies of feed per animal, therefore, are the largest in more than 10 years.

In the eastern Corn Belt States, corn yields vary from about average to nearly one-third above average. In the western Corn Belt States production is again below average, due largely to another drought in the area west of the Missouri River, but partly to reduced acreage in these States. Kansas and Nebraska are the only important livestock producing States, however, where feeding will be restricted during the coming year. Below-average production in some other States will be offset by a reduced number of livestock on farms.

DURING the 1936-37 feeding year livestock feed ratios were generally unfavorable to livestock producers. In the last few months, however, a marked decline in feed grain prices with a relatively smaller decline in livestock prices has resulted in a material improvement in feeding ratios. The situation of livestock feeders, dairymen, and poultry-men is now much more favorable than at any time during the past marketing year. With large supplies of feed grains available relative to livestock numbers, favorable feeding ratios are to be expected during the remainder of the feeding year. Livestock producers may be in a favorable situation for the next 2 or 3 years if feed grain production continues near average.

Larger feed supplies have apparently already begun to influence livestock production. Reports from cattle

feeders and statistics on the shipments of feeder cattle into the Corn Belt indicate that many more cattle are being placed on feed this fall than a year ago. Average weights of hogs marketed in the last 2 months have been much heavier than a year earlier and heavier than average.

PRESENT indications are that there will be a substantial increase in the spring pig crop. The production of eggs per 100 layers was the largest on record on November 1, due to large supplies of feed available and favorable weather conditions. Although production of milk per cow on November 1 was somewhat less than on that date last year, production this winter is expected to be higher than a year ago as a result of increased grain feeding.

With total hog numbers estimated about 25 percent below average, and as much as 50 percent below average in much of the western Corn Belt area, a volume of production equal to the 1928-32 average is not to be expected for another 2 or 3 years.

The number of beef cattle on farms is still somewhat more than in the period 1928-32, but more than 5 million head below the peak in 1934. Dairy cattle numbers are also above the 1928-32 level, but about 2 million head less than on January 1, 1934.

Sheep numbers are not greatly different from the 1934 level, but poultry numbers have been reduced materially. Heavier feeding of livestock and an increased production of livestock and livestock products are in prospect for the next few years, should feed grain production continue near average.

IN the Corn Belt States west of the Missouri River, low corn yields during the past 4 years, together with the program of the Agricultural Adjustment Administration and a relatively favorable wheat situation, have caused farmers to reduce corn acreages in contrast to the general upward

trend in this area during the years prior to 1932.

Reductions in corn acreages during the last few years have been largest in Kansas and South Dakota, where 1937 acreages were the smallest in more than 20 years. Substantial reductions were also made in Nebraska and Missouri. Much of the acreage taken from corn in this area has been diverted to wheat.

THE accompanying table shows changes in corn acreage, hog production, and cattle numbers in the different Corn Belt States during the last 5 years. The 1932 corn acreage was the second largest on record; acreage was especially large in the western Corn Belt area. Reductions from this high level have been general for the entire Corn Belt, but have been largest in the western Corn Belt.

Changes in corn acreage, hog production, and cattle numbers in the Corn Belt States and the United States since 1932

State	Corn			Hogs			Cattle		
	Acreage harvested			Pigs saved ¹			Other than milk cows		
	1932	1937 ²	Change	1932	1936 ³	Change	1933 ⁴	1937 ⁴	Change
	1,000 acres	1,000 acres	Percent	1,000 pigs	1,000 pigs	Percent	1,000 head	1,000 head	Percent
Ohio.....	3,681	3,906	+6	4,783	4,049	-15	834	927	+11
Indiana.....	4,683	4,662	0	5,729	4,606	-20	787	877	+11
Illinois.....	9,817	9,451	-4	7,552	5,563	-26	1,436	1,586	+10
Michigan.....	1,542	1,620	+5	1,248	1,229	-2	628	698	+11
Wisconsin.....	2,268	2,402	+6	2,524	2,716	+8	1,118	1,106	-1
Minnesota.....	4,945	4,788	-3	5,185	4,255	-18	1,615	1,540	-5
Iowa.....	11,849	11,036	-7	14,239	11,268	-21	2,877	2,833	-2
Missouri.....	6,472	4,604	-29	6,235	3,568	-43	1,770	1,526	-14
South Dakota.....	5,030	3,155	-37	2,723	1,843	-32	1,498	1,077	-28
Nebraska.....	10,644	8,748	-18	5,995	3,617	-40	2,842	2,339	-18
Kansas.....	7,362	3,228	-56	4,081	1,782	-56	2,690	2,169	-19
Total.....	68,293	57,600	-16	60,294	44,496	-26	18,095	16,678	-8
United States.....	110,577	96,146	-13	82,525	65,699	-20	44,278	41,635	-6

¹ Combined spring and fall pig crops.
² July estimate of acreage for harvest.

³ Preliminary.
⁴ Numbers on January 1.

Livestock numbers were also relatively high prior to the drought, but low feed grain production has made necessary a material reduction in livestock numbers since 1932. The reduction has been due largely to lower yields and only partly to a reduced acreage of feed grains.

WHILE some increase in livestock production is to be expected dur-

ing the next few years, the unfavorable feeding situation in the western Corn Belt in recent years will tend to limit expansion in this area. The high level of feed grain and livestock production reached just prior to the severe drought will probably not be regained in these States for several years.

M. CLOUGH.

Cottonseed oil comprised about 49 percent and coconut oil only 24 percent of the fats and oils used in the production of oleomargarine during the first 9 months of 1937. In some former years, coconut oil comprised 75 percent of all fats used in the production of oleomargarine.

Cottonseed Also Goes to Market

LATEST crop estimates indicate the production this season of the largest crop of cotton in the Nation's history. Cottonseed also is the largest crop on record.

Fifty years ago cotton was a single crop; the seed, except as needed for planting, was a total waste. Cotton is now a dual crop with the lint ranking first and the seed second in farm value of products grown in the Cotton Belt. Farm income from cottonseed ranks about tenth or eleventh of all farm crops in the United States.

A RECORD crop of about 8,300,000 tons of cottonseed will be produced this year. Probably nearly 6,000,000 tons will be sold to the cottonseed oil mills which will produce about 1,856,000,000 pounds of crude cottonseed oil, 2,725,000 tons of cottonseed cake or meal, 1,560,000 tons of cottonseed hulls, and 1,750,000 bales of cottonseed linters.

This is enough oil, were all of it economically refinable, to allow every man, woman, and child in the United States a total of about 15 pounds of such food products as vegetable shortening (hydrogenated oil), salad oil, and margarine. Not all of the cottonseed oil produced is economically refinable, however, so that about 9 or 10 percent likely will come to the consumer in the form of soap. But in the process of refining, the residues are also turned into such valuable products as glycerin, pitch, roofing, paint, and putty.

Cottonseed cake or meal about 30 years ago was chiefly used as a fertilizer largely because of its nitrogen content; now the largest demand is from cattle raisers and milk producers because of its protein content. Each year cottonseed cake and meal attract new consumers and now forms part of the balanced ration of horses, mules, sheep, hogs, and poultry. Some is refined as a flour for human consumption.

Cottonseed hulls, the least valuable of the four products of the seed, are used chiefly as roughage feed locally, and during shortages of hay are extensively used on the ranges.

THE fourth product derived from cottonseed during the processing by the oil mills is cotton linters. Linters are the residual fibers left on the seed after ginning. They were first removed simply for the purpose of making a more perfect separation of the hulls from the meats or kernels which contain the valuable oil and protein. Now they are used for many products from mattress felts to cellulose.

Standard grades have been established by the Bureau of Agricultural Economics for cotton linters as for cotton. Grade No. 2 linters is the base quality for use in felts, particularly for mattress felts; grade No. 6 is the basis of quality for use in cellulose in the manufacture of a long list of modern articles such as rayon, the nonbreakable part of shatterproof glass, plastic drinking tumblers, varnishes, artificial leathers, sausage casings, and photograph films.

The production of cotton linters this year may vary from 1,100,000 bales to 2,200,000 and the average quality from grade No. 2 to No. 5, since both the size and quality of the crop are controllable by simple adjustments of the delinting machinery. This is commonly called "controlling the cut per ton"—a practice of interest to the cotton grower since the value of the linters recovered is reflected in the price paid for cottonseed.

Variations in production and grades, depending upon the cut per ton of cottonseed crushed, are shown in the accompanying table. The current prices are practically nominal because of the probability of an excessively large crop which is reflected in reduced demand. (The average farm

price for cottonseed was \$33.27 per ton in 1936-37 when production of linters totaled 1,131,295 running bales. The average farm price for the period August through October 1937 was \$21.38 per ton.)

Average cut per ton of cottonseed crushed	Estimated probable yield in equivalent 500-pound gross bales of linters	Estimated probable average grade U. S. standards	Average price, season of 1936-37	Average price, current season
Pounds	Thous. bales		Cents per pound	Cents per pound
90	1, 100	2	5.80	3.50
120	1, 500	3	5.25	3.00
150	1, 880	4	4.64	2.50
180	2, 200	5	4.18	2.00

COTTONSEED varies widely in composition, due to variety and environmental conditions of growth and harvest. Recently, standards for grading cottonseed were established by the Bureau. Buying on the basis of standard grades relieves the crushing mills of one of the large risks of their business; it enables them to pay prices more commensurate with the value of the products of cottonseed.

The Bureau also maintains a limited market news service on cottonseed, making price information available to producers and enabling middlemen who buy cottonseed direct from producers to pay prices more nearly in relation to the actual value received from the seed.

GUY S. MELOY.

Many Factors Affect Farm Wages

IN the October issue of *The Agricultural Situation*, the relation between annual farm wage rates, farm prices, and factory wage earnings for the post-war years 1919-37 was shown. Farm prices were there used as an approximate measure of the farmer's ability to pay and average factory wage earnings as a measure of the various industrial factors that affect farm wages.

Here the study of farm wages and related factors is carried back to the pre-war years 1910-14, and the related factors used are per capita income from farm production available for living purposes and per capita income available for living of the non-farm population.¹

The assumption, as in the previous article, is that the general level of annual farm wage rates is determined by both agricultural and industrial conditions and that in this case (1) agricultural conditions—production, prices, costs, labor supply—are repre-

sented by income from farm production available for farm operators and hired labor after paying other production expenses and (2) nonagricultural employment, earnings, wage rates, and the actual or potential movement of industrial labor to and from farms are represented by average incomes received by all individuals other than farmers.

That the annual level of farm wages has actually been the resultant of the many factors represented by these two income series is suggested by the analyses contained in the accompanying chart. The outstanding features are:

1. Farm income, farm wages, and nonfarm income were all relatively stable in the pre-war years 1909-15.

2. Farm income advanced to a peak of 260 percent of the pre-war average in 1919. Farm wages advanced to 205 percent in 1919 and to a peak of 240 percent in 1920, a year after the peak in farm income. Nonfarm income advanced more gradually, to a peak of 185 by 1920.

3. The low point in farm income in 1921 was followed by a low point in farm wages in 1922.

¹ For the nature of these series, see article in *The Agricultural Situation*, May 1937, on Parity Income from Farm Production.

4. During the post-war deflation, farm wages fell more nearly in accord with the sharp decline in farm income than with the moderate decline in nonfarm income.

5. During the period 1921-29, farm wages remained at a level below the level of nonfarm income, but above the level of farm income.

6. During the recession period 1929-33, farm wages shared in the general decline and continued to be supported

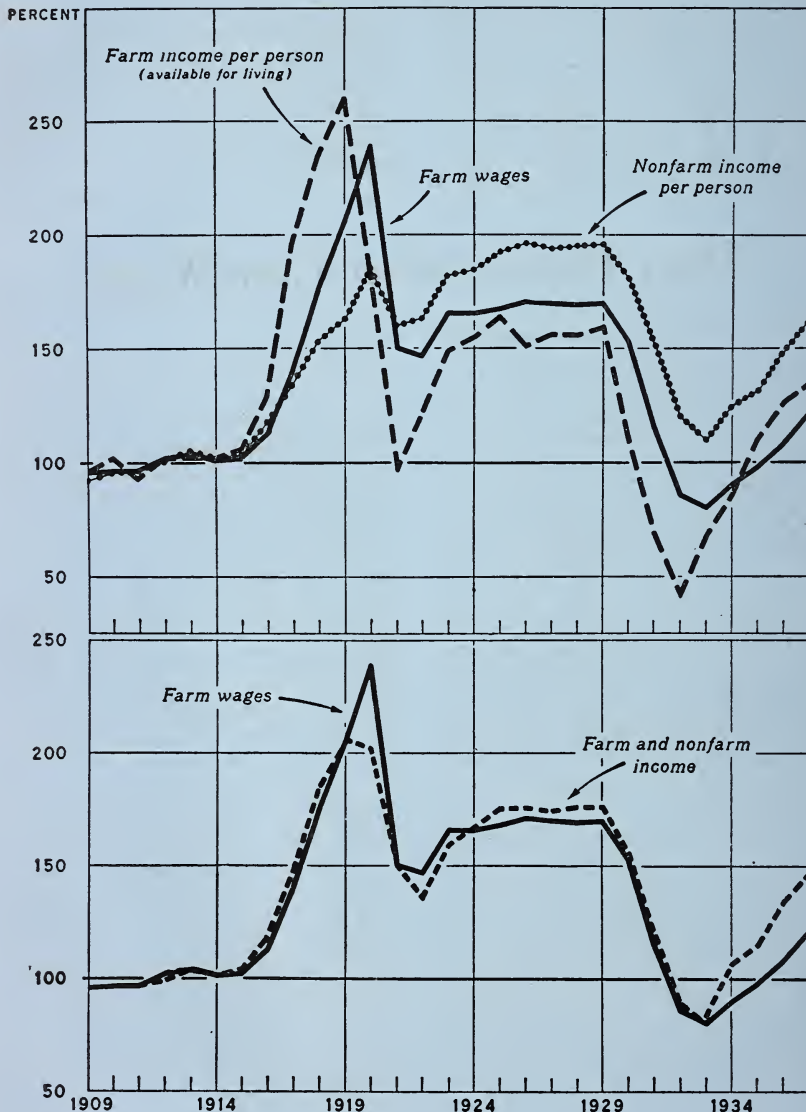
by the relatively higher level of nonfarm income and held down by the relatively lower level of farm income.

7. The low point in farm income in 1932 was followed by a low point in farm wages in 1933.

8. During the past four years the relation of farm wages to farm and nonfarm income has differed from that of the previous years, with the result that farm wages are now relatively lower than both farm and nonfarm

FARM WAGES AND FARM AND NONFARM INCOME

1910-14=100



income. This situation is substantially different from that of any in the entire period from 1910 to 1933, with the exception of the two years 1915 and 1916, when farm wages were also below the farm and nonfarm income levels but to a much smaller degree.

Taking into account the fact that 1937 marked the fourth year in a recovery period after the low point in farm wages, and observing the relation of farm wages to farm and nonfarm income in the corresponding years of 1919 and 1926, it would seem that farm wages should have averaged between 145-150 percent of the pre-war level instead of 122.

THE close dependence of farm wages on the factors represented by these two income series is brought

out more strikingly in the lower half of the chart. Here the farm and nonfarm income series have been averaged, with equal weighting, but the farm income series was first converted into a 2-year moving average, to take into account the apparent lag of farm wages after farm income in 1919-20, 1921-22, and 1932-33. Thus the nonfarm figure for 1933 was averaged with the two-year average of farm income in 1932 and 1933 and related to farm wages in 1933. The only outstanding discrepancies appear in 1920 when farm wages rose to a higher level than the usual relation to farm and nonfarm income would indicate, and in 1936 and 1937 when they failed to rise as high.

L. H. BEAN.

Interdependence of Agriculture and Industry

RECENT events again call attention to the interrelationship of agriculture and industry. It is hardly a coincidence that, after having increased steadily since early 1933, both farm and nonagricultural income are declining. Farm prices which had already been wavering, owing to the larger production which was anticipated earlier in the season, will not be helped by a reversal in income and buying power of the nonfarm population. Some recession in farm income in 1938 as compared with 1937 is to be expected.

Farm prices had fallen to such low levels in 1932 that cash income from sales exceeded production expenditures by less than 50 percent as compared with an average of about 100 percent during the 1924-29 period; but from early 1933 until about the middle of this year the trend of income was sharply upward. Cash income from sales for 1937 is expected to exceed production expenditures by more than 100 percent. Owing to the greater

increase in income than in production expenses, the balance available for farm family living has increased from less than \$1,500,000,000 in 1932 to about \$4,500,000,000 for the current year.

IMPROVEMENT in demand incident to expanding production and consumer income has been the principal factor in increasing gross cash income during the past 5 years. Contributing substantially to this general economic improvement, at least in its early stage, were many Government activities such as those designed to strengthen the banks, to reflate prices, to stimulate industrial activity under codes of fair competition, to give temporary employment or direct aid to persons dropped from industrial payrolls, to stimulate construction activity. Once the deflationary forces were stopped and recovery had been set in motion the pent-up demand created by underconsumption of previous years was sufficient to carry the movement forward.

A second factor contributing to the gains in farm income was the smaller volume of farm products at higher prices which tended to give the farmer a larger share of the consumers' food dollar, and effected a reduction in costs relative to gross cash income. This was important in increasing farm income available for family living.

The droughts of 1934 and 1936 and Agricultural Adjustment Administration programs designed to bring about a better balance between farm production and effective demand for agricultural products have been important factors in the restoration of prices of farm products to a more equitable relationship to the general price level than existed from 1931-34.

A two billion dollar decline in mortgage indebtedness—owing partly to foreclosure but also to refinancing through aid of the Farm Credit Administration—lower interest rates and some decline in the farm tax burden have also contributed to the increase in income available after costs.

THE declining trends in interest and taxes have now ended. Farm taxes turned upward in 1936. Little if any further decline in mortgage interest is expected; rates on July 1, 1938, will rise from $3\frac{1}{2}$ to 4 percent on about 30 percent of all farm mortgages. This is the approximate portion now held by Federal Land Banks. Thereafter for a year the interest on all farm debt held by Federal agencies (now estimated as 40 percent of the total) will be 4 percent, after which time the higher rates stipulated in loan contracts will apply. Mortgage interest accruals will, therefore, be substantially more beginning with July 1939 than at present.

The fact that important operating costs, which had been declining until recently, have now stabilized or turned upward, together with prospect of some reduction in farm cash income in 1938 suggests a reduction in the net gain in income. This makes imperative the prevention of such maladjustments between agricultural and

nonagricultural income as developed after 1929 if economic conditions similar to those which then existed are to be avoided. The dependence of farmers on the urban market for their products gives them a vital interest in industrial conditions. Similarly, the jobs of industrial workers, owing to the partial dependence of industry on a farm market for its products, are affected in no small degree by the farm situation.

SOME indications of the effect of a changing farm market on industrial conditions is shown below:

Percentage gain 1933-1937

[Years end June 30]

Rural retail sales.....	101
Advertising, farm papers.....	96
Factory employment in farm implement plants.....	274
Urban retail sales (department stores).....	43
Advertising, general index.....	46
Factory employment in machinery, excluding farm and transportation.....	121

Sources: Rural sales, United States Department of Commerce; Urban sales, Federal Reserve Board (department store sales index); advertising, printers' ink; factory employment, Bureau of Labor Statistics.

It is apparent from these measures of rural and urban demand that industry has benefited substantially from farm recovery since 1932. They show that rural demand has improved about twice as much as urban demand. Of course, this greater improvement is due chiefly to the larger contraction in rural than in urban purchasing power between 1929 and 1932. The larger reduction in rural buying power than in urban was responsible for a substantial portion of the jobs lost by industrial workers after 1929.

ASSUMING that the same amount of industrial labor is required to produce a dollar's worth of goods for the rural market as for the urban and export markets, the annual changes in factory employment since 1929 and the portion of these changes estimated as due to fluctuations in rural buying were as follows:

The estimated change in number of factory workers due to changes in trade ¹

	Total	Rural trade ²	Percent rural of total change
	(000)	(000)	
1930.....	-1, 121	-336	33
1931.....	-1, 175	-250	21
1932.....	-983	-63	6
1933.....	+544	+218	40
1934.....	+868	+140	16
1935.....	+293	+103	35
1936.....	+457	+99	20
1937 (estimated).....	+694	+90	13

¹ Changes in the number of factory workers necessary to supply goods to all buyers and to rural buyers as estimated from Department of Commerce retail trade and export data and Bureau of Labor Statistics factory employment reports.

² Rural trade as used here consists of retail trade in all places with population under 2,500 plus mail-order sales.

Rural contribution to the changes in factory employment is especially large immediately following reversals in trend. For instance, one-third of all factory employees who lost their jobs in 1930 could apparently attribute this to the weakened farm situation. Similarly, it is estimated that two out of five who were added in 1933 owed their jobs to improvement in farming conditions.

IT may be demonstrated that stable income for the nonagricultural population and balanced production of food products would largely solve the farmers' problems. This solution would not constitute a burden on the city population which, in the aggregate, expends an almost constant portion of current income for food products. Naturally, prices of food products adjust themselves to take into account the changing demand represented by fluctuations in total consumer purchasing power.

It follows that in times of distress persons fortunate enough to be regularly employed may buy food with a smaller portion of their income than in more normal times, whereas those not so fortunate may have to pay a much larger portion of their current income for food or may even have to draw on savings. In short, it is the aggregate food bill of the nonfarm population which remains practically

constant in relation to income; so far as individuals making up the aggregate are concerned, this is by no means true.

From the foregoing it might appear that farm income, about three-fourths of which arises from the sale of food products, should remain in close balance with income of the nonfarm population at all times. But the farmer does not get a constant portion of the consumer's food dollar. His prices fluctuate much more violently than do transportation, processing, and handling costs. He gets what is left after the other costs have been met. As a result, nearly two-thirds of the decline in consumer's expenditures for food products from 1929 to 1933 was passed back to the farmer, according to our estimates. Similarly, it appears that an even greater portion of the increase in consumer food expenditures since 1933 have been added to farm income.

THE close relationship between consumer income and retail expenditures for food and the changing proportion of the retail food dollar which has gone to the farmer since 1929 are shown below:

	Non-agricultural income ¹	Retail food sales ¹	Ratio sales to income	Farmers' percent of retail food dollar ²
	Mil.	Mil.	Percent	
1929.....	\$71, 144	\$15, 206	21.4	47
1930.....	66, 750	14, 186	21.3	44
1931.....	56, 836	12, 352	21.7	38
1932.....	44, 918	9, 856	22.0	33
1933.....	41, 901	9, 197	21.9	36
1934.....	47, 784	10, 257	21.5	40
1935.....	51, 151	11, 043	21.6	45
1936.....	57, 815	11, 929	20.6	44

¹ Estimates based on U. S. Department of Commerce income and retail sales data.

² Based on Bureau of Agricultural Economics studies covering 58 foods. Adjusted in 1933-35 to include processing taxes.

The farmer's portion of the retail food dollar from 1935 to date has averaged about 45 percent, or somewhat below the ratio in 1929. Present prospects suggest a declining trend in this ratio for 1938 rather than further

improvement. This would result in an agricultural-industrial income balance even somewhat less favorable to agriculture.

ACCORDING to the Soil Conservation and Domestic Allotment Act, under which national farm programs are now being administered, a favorable balance between agriculture and industry is one in which the per capita purchasing power of farm income bears the same relation to that of the nonfarm population as during the 5 years prior to outbreak of the World War.

Determination of just how near we are to this desired purchasing power balance at the present time must await completion of income, expenditure,

and cost of living studies now in progress. We know fairly definitely from data now available that per capita money income from farm production available for living is about 15 percent lower relative to that of the nonagricultural population than it was before the war.

Farm prices and income usually fluctuate more violently than general prices and national income. Therefore, the uncertain outlook for the immediate future is of particular concern to the farmer and those cooperating with him in an attempt to prevent such sudden shifts in prices and income as will act as an unsettling influence in the entire economic situation.

P. H. BOLLINGER.

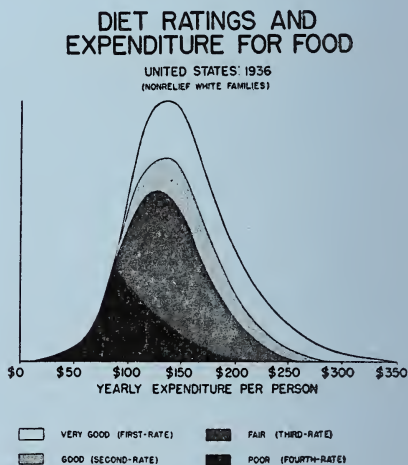
A Dietary Goal for Agriculture

A RECENT study of consumer buying, by the Bureau of Home Economics in cooperation with other Federal agencies,¹ has revealed the inadequate dietary of a large segment of the population. In many cases the deficiency is due to the fact that families spend too little for food to obtain good diets (because of inadequate income or failure to apportion income properly); in others, it is due to the improper choice of foods.

To provide the whole population with a fully adequate diet is a generally accepted goal of agriculture. To help attain this goal was largely the purpose of the Bureau's consumer expenditures survey covering more than 21,000 native white nonrelief families in all parts of the country. Results of the survey, plus data collected by the Bureau of Labor Statistics in its 1935-36 study of disbursements of wage earners and low-salaried workers, are embodied in the accompanying chart.

¹ Works Progress Administration; National Resources Committee; Department of Labor; Central Statistical Board.

This chart shows the distribution of families according to grades of diet at various levels of yearly per capita ex-



penditure for food. The dollars on the base line represent yearly expenditure for food per person. The height of the outer curve is based upon the relative number of families at a given level of expenditure for food.

DATA concerning food consumption furnished by families visited by field agents were analyzed, and on the basis of the nutritive content of the diet each family was classified in one of four dietary groups—grades A to D. The grade A and grade B diets provide fully for nutritional needs of the body by standards comparable to those set up by the International Nutrition Committee of the League of Nations. Tentative vitamin standards are the basis for the distinction between grades A and B, with grade B furnishing from one-half to two-thirds the quantities of vitamins in grade A. The grade C diets provide for average physical needs but build up little reserve. The grade D diets, long continued, will undermine health.

The shading of the chart shows the four diet grades. It should be understood, however, that there are borderline cases which tend to make lines of demarcation between the groups less clear-cut in practice, than the charts may imply. For example, the best diets included in the grade B group would be similar to the poorest diets in the grade A group.

ANALYSIS of the food expenditures survey shows that some families spend too little for food to buy good diets, however carefully the food may be selected. All diets were found to be very poor among families which, in 1936, spent less than \$85 per person per year for food. At least 10 percent of the white nonrelief families were in this group.

The study revealed that the chances for better diets increase with rising per capita expenditures for food. At the median spending level (\$130 per person per year) 22 percent of the families had first-rate diets; 13 percent, second rate; 49 percent, third-rate or fair diets; and 16 percent, very poor diets.

At a still higher level of expenditure (\$180 per person per year for food) more than 60 percent of the families had good or very good diets and less than 5 percent, very poor. It is clear that quality of diet is associated with level of expenditure for food.

On the tables of the more well-to-do milk, butter, meat, eggs, green-colored and leafy vegetables, and fruits appear several times as much as on the tables of the poor. These foods add interest and flavor to meals; some are especially helpful in reinforcing diets most likely to be deficient from the standpoint of good nutrition.

But the quality of the food supply selected by families is by no means only a matter of level of food expenditures. At every expenditure level above \$100 per person per year for food, some families succeeded in obtaining very good diets while others got only fair or poor food. Three-quarters of the families were spending \$100 or more per person per year for food, but fewer than 30 percent were selecting very good diets. The difference in the use of money for food is conditioned, of course, by many factors including market supplies and facilities, traditional food habits, and education, all of which probably are more or less influenced by income as well as by the social heritage.

ABOUT a quarter of the white nonrelief families in this country are selecting diets that are very good, nutritionally speaking; about one-fifth, very poor diets. In between are about one-sixth of the families with good diets, and about two-fifths with diets that are fair from the standpoint of nutrition.

If all families could enjoy really good diets, the results would be of national import. American stamina and health would be raised. American farmers would be called upon to supply larger amounts of certain products.

If average consumption of city families could be raised to the level of families whose diets cost less than \$165 per person per year (1936 price levels), but whose food supply was rated as first class in the Bureau's analysis, there would be need for 15 percent more eggs, 33 percent more milk (fluid, evaporated, dried, or in the form of cheese), and 20 percent more vegetables and fruits.

The problem is not merely one of supplying more and cheaper food to

city markets. It involves nonagricultural production too, and the distribution of national income. The protective foods are expensive to produce, and in the long run farmers can produce only when they receive a fair return for their labor and investment. Agriculture can bend every effort to produce even better products more economically, but only part and often only a small part of retail food costs can be chalked up against farm production. The solution is a task calling for the best efforts of those formulating social policies, of research workers, and of persons engaged in production both on farms and in factories.

WE are sometimes asked whether families would spend more for food if incomes were increased, or whether the money would go for autos or clothes. Most families—city, village, and farm—now spend for food between 27 and 43 percent of the money that goes for all living expenses. This

is the largest share allocated to any single item. If incomes were increased \$100 yearly per family, the amount of this increase put into food would depend upon the income bracket in which a family is found.

An analysis of the spending ways of small city families in three income classes in one of our tabulation units showed these striking results:

Families with incomes under \$1,500 yearly (60 percent were in this class) would probably spend \$20 for food out of an income increase of \$100.

Families with incomes between \$1,500 and \$3,000 yearly (32 percent were in this class) would probably spend \$10 for food out of an income increase of \$100.

Families with incomes between \$3,000 and \$7,500 (8 percent were in this class) would probably spend only \$3 for food out of an income increase of \$100.

The potential market for food is among the lower-income groups.

HAZEL K. STIEBELING.

Recent Trends in Exports and Imports

FOREIGN trade statistics for the first quarter of the current fiscal year (July through September) disclose a significant change in the agricultural export-import situation. They show that exports of agricultural products are beginning to increase; that imports of competitive products are beginning to decline. The basic reason for this change is to be found in the relatively large crops of 1937.

COTTON is by far the most important agricultural export. Changes in the value and volume of cotton exports usually determine the changes in the value and volume of total agricultural exports. Particular interest attaches to the export movement of cotton this year in view of the record crop of 18,746,000 bales estimated by the Crop Reporting Board as of December 1.

Exports of cotton for the 3 months July through September totaled

962,000 bales. This was more than in the same months of 1936 but somewhat less than in the same period of 1935. Later weekly figures indicate that exports this year continue ahead of those of the corresponding months last year. These larger exports have taken place despite a marked decline in exports to Japan. The largest increase in exports has been to the United Kingdom with somewhat smaller increases to some of the continental European countries.

NEXT to cotton, the export situation in wheat is perhaps of the most general interest. From the crop year 1934-35 through 1936-37 the United States imported more wheat than it exported. The figures for the first quarter of the current fiscal year, however, indicate that we are once more on a substantial export basis. During these 3 months our exports of wheat, including flour,

totaled more than 15,000,000 bushels—much above the exports in the same periods of 1935 and 1936.

Exports of leaf tobacco have been more stable than any of our other export products since the beginning of the world depression in 1929. During the first quarter of the present fiscal year exports of leaf tobacco totaled 93,000,000 pounds or the same as the exports in the same quarter of 1936 and somewhat more than in 1935. Principal foreign markets for leaf tobacco are the United Kingdom and China. Exports to the United Kingdom have held up well, but the latest figures on exports to China show a considerable decline.

FRUIT as a whole now represents one of the leading agricultural export groups. Apples are the leading item. Exports of apples from July through September this year were a little more than 1,000,000 bushels. This was much more than the shipments in the same months of 1936 when we had a short apple crop, but substantially less than the shipments in 1935. In view of the large apple crop of 1937 it seems likely that our total shipments this season will be much more than in 1936-37 and may equal or exceed the relatively heavy exports of 1935-36.

CORN is exported from the United States chiefly in the form of cured pork and lard. Since there is this intermediate process of feeding the corn to hogs before export supplies are available, there is, of course, less relationship between current crops and exports than is the case with the annual crops.

The large corn crop for 1937, for instance, will not show up in larger hog numbers and larger supplies of pork and lard for export until the latter part of 1938. Nevertheless, the exports of lard in the first quarter of the current fiscal year, amounting to 24,600,000 pounds, were substantially above the exports in the same

period of 1936 and much above the exports in the same period of 1935. On the other hand, exports of cured pork during July to September, reflecting the continued high prices resulting from reduced hog numbers, totaled only 9,500,000 pounds in the July to September period. This was less than exports in the same period in the 2 preceding years and far below the level of exports in the years prior to 1934.

AS TO imports, it is proposed to examine here only the items that have been especially affected by the drought situation in recent years. The outstanding example is corn.

Imports of corn into the United States for the period July through September amounted to 33,000,000 bushels, which was much above the imports for the same months of the two preceding years. But the significant fact is that corn imports have declined steadily since July when they reached the peak for the calendar year of more than 15,000,000 bushels. In September the imports were less than 6,000,000 bushels; according to trade reports, there was a further reduction in October. There has been a considerable export movement of domestic corn to Europe during recent weeks.

WHEAT imports, falling steadily since last June, amounted to less than 600,000 bushels in the first quarter of the fiscal year. This compares with 7,000,000 bushels in the same period of 1935 and with more than 15,000,000 bushels in the July to September period of 1936. Imports of wheat in September of this year totaled only 1,000 bushels, as compared with our exports of almost 5,000,000 bushels of wheat and wheat flour in the same month.

Other principal agricultural import items which have been significantly affected by the short domestic supplies and high prices in recent years are livestock and livestock products, notably live cattle, canned beef, and butter.

IMPORTS of cattle in the first quarter of the current fiscal year totaled 132,000 head, which was considerably more than imports in the same quarters of 1936 and 1935. The relatively large imports during the current fiscal year were due to the high prices for cattle in the United States. The larger feed crops of 1937 have not yet had time to be reflected in increased cattle numbers in this country.

Imports of canned beef have also continued large, amounting to almost 28,000,000 pounds in the July to September quarter of 1937, as compared with about 19,000,000 pounds in the same months of 1935, and with 23,000,000 pounds in 1936. The continued large imports of canned beef

also have been due largely to the relatively high meat prices in this country.

IMPORTS of butter are usually of a seasonal nature and are not ordinarily imported in substantial quantities during the summer months. In 1936, however, butter imports were fairly large during the July to September period, amounting to a little more than 2,000,000 pounds, whereas in the current fiscal year imports for the first quarter were less than 600,000 pounds.

The monthly and annual import and export figures for the products referred to in this statement, as well as other products, are shown in more detail in the table on page 23.

L. A. WHEELER.

Measures of Domestic Demand

[1934-29=100]

	October				Percent change		
	1929	1933	1935	1937	1936-37	1933-37	1929-37
National income.....	108.4	64.1	89.6	96.5	+8	+51	-11
Nonagricultural income:							
Total.....	108.6	65.8	89.8	96.4	+7	+47	-11
Per capita.....	102.5	60.7	80.5	85.6	+6	+41	-16
Factory pay rolls:							
Total.....	107.5	57.8	85.2	95.8	+12	+66	-11
Per employed wage earner.....	102.0	71.1	90.2	97.7	+8	+37	-4
Industrial production:							
Total.....	110.5	71.1	103.0	96.4	-6	+36	-13
Factories processing farm products.....	108.3	91.3	107.7	90.6	-16	-1	-16
Other factory production.....	111.3	62.4	101.3	97.5	-4	+56	-12
Construction activity:							
Contracts awarded, total.....	88.4	30.6	47.1	41.3	-12	+35	-53
Contracts awarded, residential.....	60.0	10.8	38.5	32.2	-16	+198	-46
Employment in production of building materials.....	93.0	42.5	59.2	60.4	+2	+42	-35
Cost of living:							
Food.....	103.6	68.9	79.8	81.8	+3	+19	-21
"All other items".....	98.1	82.7	82.6	86.1	+4	+4	-12
Purchasing power of nonagricultural income per capita:							
For food.....	98.9	88.1	100.9	104.6	+4	+19	+6
For "All other items".....	104.5	73.4	97.5	99.4	+2	+35	-5

NOTE.—All indexes adjusted for seasonal variation except "Cost of Living."

Farm Foreclosures

Farm foreclosures in August were the smallest for any month during the last four years, according to A. S. Goss, Land Bank Commissioner of the Farm Credit Administration. During the month, foreclosures throughout the United States by all lenders numbered only 2,991. For the third quarter of 1937 foreclosures totaled 9,719, compared with 12,560 for the corresponding period in 1936—a decline of 23 percent. The current estimate is the smallest for any three-month period since data were first compiled in 1933.

The Trend of Farm Exports and Imports

EXPORTS

Year and month (ended Dec. 31)	Wheat, including flour ¹	Tobacco (leaf)	Bacon, ² hams, and shoulders	Lard ³	Apples (fresh)	Cotton, running bales ⁴
	1,000 bushels	1,000 pounds	1,000 pounds	1,000 pounds	1,000 bushels	1,000 bales
Total:						
1929.....	154,348	555,347	275,118	829,328	16,856	7,418
1930.....	149,154	560,958	216,953	642,486	15,850	6,474
1931.....	125,686	503,531	123,246	568,708	17,785	6,849
1932.....	82,118	387,766	84,175	546,202	16,919	8,916
1933.....	26,611	420,418	100,169	579,132	11,029	8,533
1934.....	36,538	418,983	83,725	431,237	10,070	5,753
1935.....	15,731	381,182	61,691	96,355	11,706	5,861
1936.....	19,079	406,810	46,725	111,292	8,897	5,409
1935:						
July.....	1,231	14,581	6,580	4,915	99	280
August.....	1,278	22,382	5,210	3,406	544	241
September.....	1,324	52,371	3,531	1,515	1,349	487
July-September.....	3,833	89,334	15,321	9,836	1,992	1,008
1936:						
July.....	1,389	19,984	7,194	7,481	179	156
August.....	1,666	26,441	4,159	6,045	178	182
September.....	2,415	46,336	2,526	7,856	482	570
July-September.....	5,470	92,761	13,879	21,382	839	908
1937 (Prel.):						
July.....	3,385	15,423	3,935	7,746	117	124
August.....	7,233	24,591	3,399	7,176	324	220
September.....	4,712	52,725	2,206	9,717	616	618
July-September.....	15,330	92,739	9,540	24,639	1,057	962

¹ Wheat flour is converted on a basis of 4.7 bushels of grain equal to 1 barrel of flour.

² Includes Cumberland and Wiltshire sides.

³ Excludes neutral lard.

⁴ Excludes linters.

IMPORTS

Year and month (ended Dec. 31)	Cattle, live	Beef, canned, including corned ²	Butter	Egg products ³	Wheat, grain ^{2 4}	Corn, grain	Barley, malt ²
	1,000 head	1,000 pounds	1,000 pounds	1,000 pounds	1,000 bushels	1,000 bushels	1,000 pounds
Total:							
1929.....	505	79,899	2,773	26,030	36	407	1,025
1930.....	234	56,105	2,472	16,156	317	1,556	4,309
1931.....	95	19,586	1,882	7,661	54	618	39,375
1932.....	106	24,639	1,014	3,085	3	344	52,533
1933.....	82	41,344	1,022	3,664	31	160	109,183
1934.....	66	46,674	1,253	3,175	7,737	2,959	193,728
1935.....	373	76,263	22,675	7,631	27,439	43,242	230,623
1936.....	410	87,804	9,874	8,598	39,669	31,471	301,767
1935:							
July.....	19	5,220	177	790	793	5,649	42,041
August.....	16	5,740	149	646	2,570	8,554	27,136
September.....	14	7,752	122	602	3,645	2,986	27,566
July-September.....	49	18,712	448	2,038	7,008	17,189	96,743
1936:							
July.....	34	7,504	308	975	4,477	1,301	31,811
August.....	19	8,938	1,183	861	6,294	1,549	29,018
September.....	23	6,439	539	736	4,604	4,144	24,923
July-September.....	76	22,881	2,030	2,572	15,375	6,994	85,752
1937 (Prel.):							
July.....	45	10,323	154	1,054	494	15,735	36,491
August.....	57	6,842	182	1,008	101	11,195	27,088
September.....	30	10,421	221	751	1	5,733	16,355
July-September.....	132	27,586	557	2,813	596	32,663	79,934

¹ General imports prior to 1934; beginning Jan. 1, 1934, imports for consumption.

² Imports for consumption.

³ Excludes eggs in the shell.

⁴ For domestic consumption and includes only wheat full duty paid and 10 percent ad valorem.

Statistics on exports and imports for the years 1920-28 are contained in the February 1937 issue of the Agricultural Situation.

Compiled from Foreign Commerce and Navigation of the United States and official records of Bureau of Foreign and Domestic Commerce.

General Trend of Prices and Wages

[1910-14=100]

Year and month	Whole-sale prices of all commodities ¹	Industrial wages ²	Prices paid by farmers for commodities used in ³ —			Farm wages	Taxes ⁴
			Living	Production	Living and production		
1920.....	225	222	222	174	201	239	269
1921.....	142	203	161	141	152	150	223
1922.....	141	197	156	139	149	146	224
1923.....	147	214	160	141	152	166	228
1924.....	143	218	159	143	152	166	228
1925.....	151	223	164	147	157	168	232
1926.....	146	229	162	146	155	171	232
1927.....	139	231	159	145	153	170	238
1928.....	141	232	160	148	155	169	239
1929.....	139	236	153	147	153	170	241
1930.....	126	126	148	140	145	152	238
1931.....	107	207	126	122	124	116	217
1932.....	95	178	108	107	107	86	188
1933.....	96	171	109	108	109	80	161
1934.....	109	182	122	125	123	90	153
1935.....	117	191	124	126	125	98	⁵ 154
1936.....	118	199	122	126	124	107	-----
1936							
November.....	120	201	-----	-----	127	-----	-----
December.....	123	211	124	133	128	-----	-----
1937							
January.....	125	209	-----	-----	130	103	-----
February.....	126	211	-----	-----	132	-----	-----
March.....	128	218	127	139	132	-----	-----
April.....	128	219	-----	-----	134	112	-----
May.....	128	219	-----	-----	134	-----	-----
June.....	127	220	129	141	134	-----	-----
July.....	128	218	-----	-----	133	123	-----
August.....	128	220	-----	-----	132	-----	-----
September.....	128	215	129	132	130	-----	-----
October.....	125	214	-----	-----	⁴ 128	126	-----

Year and month	Index numbers of farm prices [August 1909-July 1914=100]								Ratio of prices received to prices paid
	Grains	Cotton and cottonseed	Fruits	Truck crops	Meat animals	Dairy products	Chickens and eggs	All groups	
1920.....	232	248	191	-----	174	198	223	211	105
1921.....	112	101	157	-----	109	156	162	125	82
1922.....	106	156	174	-----	114	143	141	132	89
1923.....	113	216	137	-----	107	159	146	142	93
1924.....	129	212	125	150	110	149	149	143	94
1925.....	157	177	172	153	140	153	163	156	99
1926.....	131	122	138	143	147	152	159	145	94
1927.....	128	128	144	121	140	155	144	139	91
1928.....	130	152	176	159	151	158	153	149	96
1929.....	120	144	141	149	156	157	162	146	95
1930.....	100	102	162	140	133	137	129	126	87
1931.....	63	63	98	117	92	108	100	87	70
1932.....	44	47	82	102	63	83	82	65	61
1933.....	62	64	74	105	60	82	75	70	64
1934.....	93	99	100	104	68	95	89	90	73
1935.....	103	101	91	127	118	108	117	108	86
1936.....	108	100	100	113	121	119	115	114	92
1936									
December.....	134	105	93	99	122	127	133	126	98
1937									
January.....	143	107	105	115	128	128	110	131	101
February.....	146	108	127	143	126	126	101	127	96
March.....	145	116	133	131	129	125	102	128	97
April.....	154	117	142	127	130	120	104	130	97
May.....	149	112	152	139	133	116	96	128	96
June.....	139	107	157	124	137	113	95	124	93
July.....	139	106	145	96	144	116	102	125	94
August.....	119	90	123	104	151	119	109	123	93
September.....	111	74	121	117	144	123	119	118	91
October.....	93	67	99	130	136	128	127	112	⁵ 88
November.....	85	65	88	124	120	132	135	107	⁶ 84

¹ Bureau of Labor Statistics Index with 1926=100, divided by its 1910-14 average of 68.5.

² Average weekly earnings, New York State factories. June 1914=100.

³ These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.

⁴ Index of farm real estate taxes, per acre, 1913=100.

⁵ Preliminary.